

Card 22/22 nst

ACC NR: AT6021505 (N) SOURCE CODE: UR/2531/66/000/0187/0013/0043

AUTHOR: Bortkovskiy, R. S.; Orlenko, L. R.; Tseytin, G. Kh.

ORG: none

TITLE: Calculation of wind and tangential stress above a water surface

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 187, 1966. Fizika pogranichnogo sloya atmosfery (Physics of the atmospheric boundary layer), 13-43

TOPIC TAGS: micrometeorology, atmospheric turbulence, wind speed, tangential stress, atmospheric boundary layer, near water boundary layer, wind velocity, ocean dynamics, ocean current, surface tension

ABSTRACT:

A procedure is presented for calculating wind and tangential stress over the open sea using a given baric field and known temperature stratification. The procedure is based on theoretical investigations made at the Department of the Physics of the Boundary Layer, Main Geophysical Laboratory. Since the roughness of the water surface is regarded as known, the problem is reduced to solving the usual equations of motion for air with a given horizontal baric gradient over a moving surface

Card 1/3

ACC NR: AT6021505

(except that the underlying surface is not motionless). Horizontally homogeneous conditions are assumed. In selecting boundary conditions, the presence of surface water currents and the temperature stratification in the boundary layer are characterized by the difference between the water-surface temperature and the air temperature at the upper limit of the boundary layer. The influx of radiant heat is assumed to be a linear function of height, a model in which there is a jump at height h is accepted in determining the turbulence coefficient k , and the Laykhtman model is accepted in determining wind velocity.

General solutions are obtained for the layers $z_0 \leq z \leq h$ and $z > h$. The solution for the first case is simplified so that the wind-velocity components are computed rapidly with auxiliary tables and nomograms. A scheme is given for finding wind velocity, tangential stress, the modulus of the wind velocity, and the angle of "friction" at a height of about 10 m above the sea. A simplified procedure is presented for calculating wind velocity and tangential stress under equilibrium conditions. The procedure was tested with limited experimental data. The applicability of the procedure is discussed, and the errors are estimated. For instance, with a time interval of 2 hr, the error in the component of the tangential stress

Card 2/3

ACC NR: AT6021505

τ_{0x} = 8% for $V_g = 15$ m/sec and $\Delta V_g = 5$ m/sec (the velocity of the geostrophic wind and the jump in the geostrophic wind);
 τ_{0x} = 12% when $\Delta V_g = 10$ m/sec; errors of 12% and 20% were noted in τ_{0y} under like conditions. The error in the wind velocity due to advection should not exceed 15%. [WA-50; CBE No. 11]

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 018/ OTH REF: 012/

Card 3/3

ACC NR: AT6021507 (N) SOURCE CODE: UR/2531/66/000/187/0054/0068

AUTHOR: Tseytin, G. Kh.

ORG: Main Geophysical Observatory (Glavnaya geofizicheskaya observatoriya)

TITLE: Theoretical wind-velocity profile under nonstationary conditions

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 187, 1966. Fizika pogranichnogo sloya atmosfery (Physics of the atmospheric boundary layer), 54-68

TOPIC TAGS: micrometeorology, atmospheric turbulence, ~~wind speed~~, wind speed profile, turbulent diffusion, atmospheric boundary layer, wind velocity, atmospheric disturbance, surface boundary layer

ABSTRACT:

A solution is obtained for the problem of determining the wind-velocity profile in the surface boundary layer of the atmosphere. This procedure can be used as a basis for a comparatively simple calculation procedure and to develop criteria for estimating the effect of a nonstationary condition on the wind field. General assumptions made in regard to the initial factors are that atmospheric conditions are horizontally homogeneous and that the coefficient of vertical

Card 1/2

ACC NR: AT602150Y

turbulent diffusion is independent of horizontal coordinates. A general solution is obtained for the equations of motion and appropriate initial and boundary conditions. Two special cases of the general solution are discussed, and two illustrative examples are presented. The final formulas are presented in a convenient form, and three tables are given to facilitate computations. It is concluded that the effect of a nonstationary condition on wind velocity practically vanishes within a few hours after the geostrophic wind velocity and the turbulence factors have changed with time. Analysis of the solutions also indicates that the influence of a nonstationary condition depends little on height in the lowest surface layer (up to 10-15 m) but increases noticeably above this layer. Hence quasi-stationary schemes are applicable to solving various meteorological problems if the above restrictions are adhered to. [WA-50; CBE No. 11]

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 002/

Card 2/2

TSEYTIM, G.S.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress* (Cont.) Moscow
Jun-Jul '56, Trudy '56, V. 1, X Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.
There is 1 USSR reference.

Tseytin, G. S. (Leningrad). Theorem on Embedded Segments, 186-187
Cauchy and Rolle's Theorems in the Constructive Analysis.

There are 3 references, 2 of which are USSR, and 1 is English.

Tseytin, G. S. (Leningrad). Simple Example of Associative 187-188
Calculus With Unsolvability Problem.

Mention is made of Novikov, P. S.

There are 2 references, both of them USSR.

Tseytin, G. S. (Leningrad). Uniform Recursiveness of
Algorithmic Operators Over Generally Recursive Functions
and a Canonical Form of the Constructive Functions of 188-189
Real Argument.

Card 60/80

*

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.)^{Moscow},
Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.
There are 2 references, 1 of which is USSR, and another
is English.

Tseytin, G. S. (Leningrad). Problem of Identification of
the Properties of Associative Calculus. 189

Mention is made of Markov, A. A.

There are 2 references, both of them USSR.

Shanin, N. A. (Leningrad). On Constructive Understanding
of Mathematical Reasoning. 189-190

Mention is made of Kolmogorov, A. N.

There are 2 references, 1 of which is USSR, and the other English.

Shestakov, V. I. (Moscow). Vectorial-algebraic Method Applied
to the Analysis and Synthesis of Multicycle Relay Systems. 190-191

Card 61/80

TSEYTIM, G. S.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.)^{Moscow},
Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.
Yanenko, N. N. (Moscow). Problems Relating to Embedding
of Riemann Metrics into Euclidean Spaces. 177-178

Mention is made of Verbitskiy.

Section of Mathematical Logic and Mathematical Fundamentals 179-191

Reports by the following personalities are included:

Adyan, S. I. (Moscow). Insolubility of Certain
Algorithmic Problems in the Group Theory. 179-180

Mention is made of Novikov, P. S.

Zaslavskiy, I. D. (Leningrad). Tseytin, G. S. (Leningrad).
On the Relations Between the Fundamental Properties of
Constructive Functions. 180-181

There is 1 USSR reference.

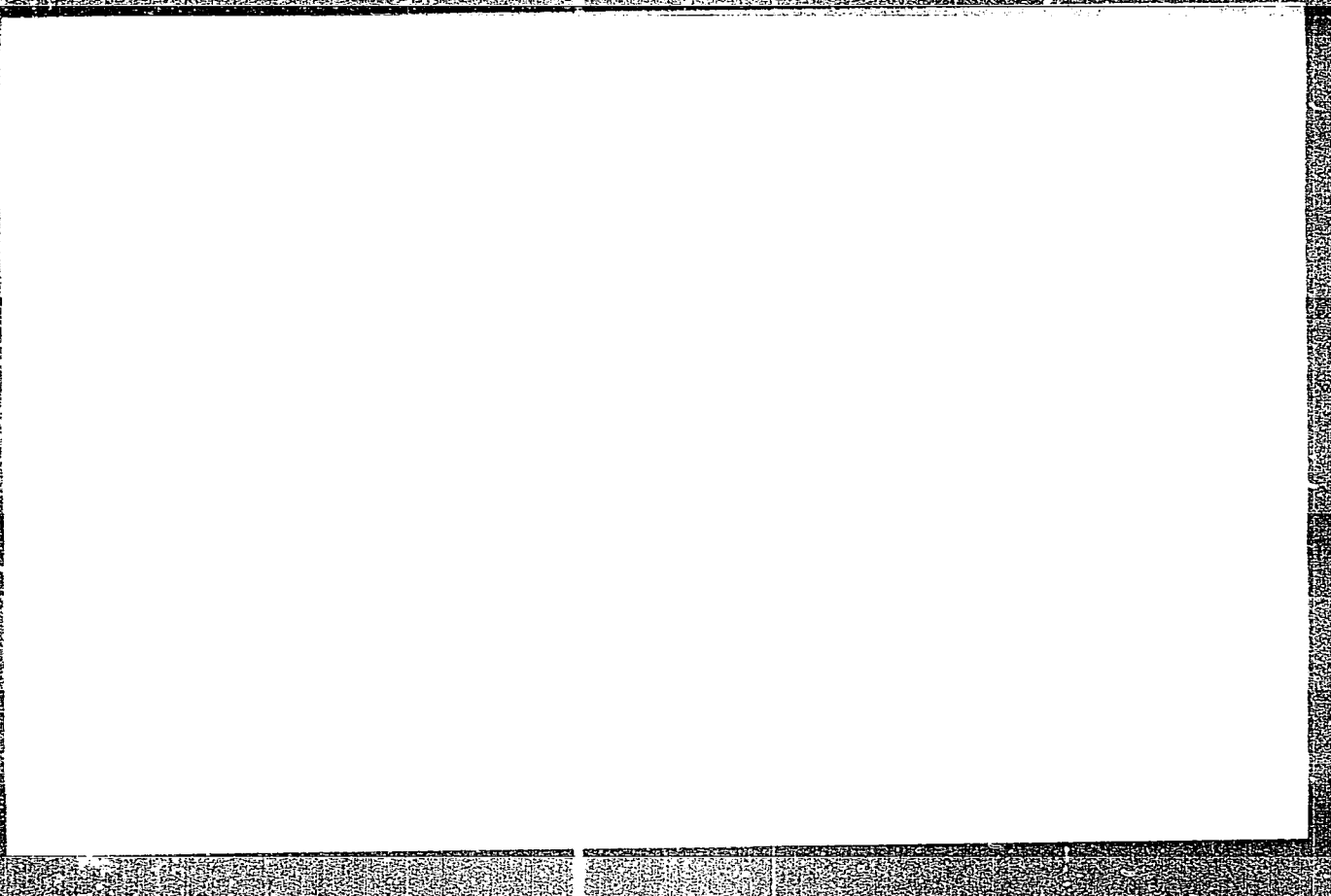
Card 57/80

PETROV, V.V.; KOVAN'KO, A.G.; TSEYTIM, G.; POLISHCHUK, Ye.

Corrections to the article "Method of least squares and its
extremal properties " (U.M.N. 9 no.1, 1954, p.41-62). Usp. mat.
nauk 11 no.2:250-251 Mr-Apr '56. (MLRA 9:8)
(Least squares)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757020002-7



APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757020002-7"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757020002-7

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757020002-7"

SOV/2146

PHASE I BOOK REPRODUCTION

28(2)

Leningrad. Universitet

Materialy po mashinnoi perevodu; sbornik 1 (Materials on Machine Translation; A Collection of Articles, No. 1). Leningrad, Izd-vo Leningradskogo Universiteta, 1958. 228 p. 1,000 copies printed.

No contributors mentioned.

PURPOSE: The book is for students, scientists, and engineers interested in machine translation.

COVERAGE: This collection of 15 articles is published as volume I of the Materials on Machine Translation. It represents the work of 25 Soviet scientists at the Leningrad University Experimental Laboratory for Machine Translation which was created in March 1958 to continue research on translating with the aid of electronic machines. Although the present volume deals with both the theoretical and the practical aspect of machine translating, the emphasis is on the compilation of algorithms for a number of languages, many of them Asiatic. There are no references.

TABLE OF CONTENTS:

Bratchikov, I.L., S.Ya. Fitalov, and G.S. Tsytin. Dictionary Structure and Information Coding in Machine Translation	61
Andreyev, M.D., B.P. Olovnikov, L.I. Ivanov, and A.K. Goloblin. Stem-separating Program for Indonesian Algorithms in Machine Translation	88
Bartov, V.P., and M.P. Cherkasova. Work on Norwegian-Russian Algorithms in Machine Translation	98
Prolova, O.B., and V.I. Strelokova. Initial Stage of Work on Arabic-Russian Algorithms in Machine Translation	112
Andreyev, M. D., Ye.A. Zlapadova, and O.A. Timokhova. Certain Problems of the Formation of Burmese-Russian Algorithms in Machine Translation	126
Zasorin, L.M., M.N. Kerchen, S.M. Medvedeva, and G.S. Tsytin. Proposed Program for a Morphological Analysis of the Russian Language in Machine Translation	136
Katamina, T.Ye. Work on Hindustani (Hindi) Russian Algorithms in Machine Translation	191
Andreyev, M.D., D.A. Batova, V.S. Panfilov, and V.M. Petrova. Elements of an Independent Analysis of Vietnamese-Russian Algorithms in Machine Translation	199
Rabinatsev, A.A., and Yu.P. Semeniashchev. Machine Translation of Japanese Into Russian	209
Laykina, B.N. First Stage of an Independent Structural Analysis of Simple Sentences in the English Language	216
Andreyev, M.D. Principles of the Construction of Electronic Reading Machines	223

AVAILABLE: Library of Congress

Card 1/3

TM/ug
9-13-58

(H)

TSYTIN, G. S.

BRATCHIKOV, I. L., FITIALOV, S. Ya. and TSEYTIN, G. S. (Leningrad)

"About the Structure of Dictionary and the Coding of Information for Machine Translation."

Theses - Conferences on Machine Translations, 15 - 21 May 1958, Moscow.

TSEYTING, G.S.

16(1)

PHASE I BOOK EXPLOITATION

SOV/1707

Akademiya nauk SSSR. Matematicheskiy institut

Problemy konstruktivnogo napravleniya v matematike; sbornik rabot, vyp. 1 (Problems Connected With the Construction Trend in Mathematics; Collection of Articles, Nr 1) Moscow, Izd-vo AN SSSR, 1958. 348 p. (Series: Its: Trudy, t. 52). 2,500 copies printed.

Ed.: N.A. Shanin; Resp. Ed.: I.G. Petrovskiy, Academician; Deputy Resp. Ed.: S.M. Nikol'skiy, Professor; Tech. Ed.: R.A. Arons.

PURPOSE: This book is intended for mathematicians.

COVERAGE: The book is a collection of works presented at the seminar on mathematical logic of the Leningrad Branch of the Matematicheskiy institut imeni V.A. Steklova (Mathematical Institute imeni V.A. Steklov) of the Academy of Sciences, USSR. The articles deal primarily with problems connected with the constructive trend in mathematics. A detailed study is made of the theory of algorithms and constructive mathematical logic. The book is divided into

Card 1/5

Problems Connected With the Construction (Cont.)

SOV/1707

three main parts: I. The General Theory of Algorithms and Its Application to the Theory of Associative Calculations. II. Constructive Mathematical Logic. III. Constructive Mathematical Analysis.

TABLE OF CONTENTS:

PART I. THE GENERAL THEORY OF ALGORITHMS AND ITS APPLICATION TO THE THEORY OF ASSOCIATIVE CALCULATIONS

Nagornyy, N.M. Certain Generalized Concepts of a Normal Algorithm 7

Introduction 1. Definition of σ -type algorithms 2. Closure of σ -type algorithms 3. σ -type algorithms and normal algorithms 4. σ -type algorithms and normal algorithms (continuation) 5. Canonical σ -type algorithms 6. Composition of σ -type algorithms 7. Branching of σ -type algorithms 8. Recursion of σ -type algorithms 9. σ -type algorithms 10. σ -type algorithms. References

Nagornyy, N.M. On the Minimum Alphabet of Algorithms Over a Given Alphabet

66

Card 2/5

Problems Connected With the Construction (Cont.)

SOV/1707

Detlovs, V.K. The Equivalence of Normal Algorithms and Recursive Functions

75

I. Introduction 1. Brief History of the problem 2. Formulation of fundamental theorems II. Algorithms of recursive functions 3. Recursive functions 4. The algorithms of primitive recursive function 5. The algorithms of an operator of the smallest number 6. The decidability partially recursive function III. The recursiveness of algorithmic functions 7. The device of arithmetization 8. The recursiveness of a substitution 9. The recursiveness of algorithmic functions of one argument 10. The recursiveness of functions of n-arguments IV. The equivalence of Normal and recursive algorithms 11. Normal algorithms of arithmetization 12. The equivalence of normal and recursive algorithms. References

Orlovskiy, E.S. Certain Problems of the Theory of Algorithms

140

Introduction I. Construction of normal algorithms inverse to a given algorithm 1. Formulation of provable theorems 2. Construction of unknown algorithms 3. Proof of theorem 2 II. Construction of a universal algorithm system 4. A universal algorithm system 5. Fundamental lemmas 6. Proof of fundamental lemmas. References

Card 3/5

Problems Connected With the Construction (Cont.)	SOV/1707
Tseytin, G.S. Associative Calculation With the Unsolvable Problem of Equivalence	172
PART II. CONSTRUCTIVE MATHEMATICAL LOGIC	
Vorob'yev, N.N. A New Algorithm of Deducibility in Constructive Proposition Calculus	193
Introduction 1. Deducibility from hypothesis 2. Normal formulas 3. Deduction of conclusions 4. Properties of deduc- tions of conclusions 5. The connection between deducible for- mulas and deducible conclusions 6. Deducibility algorithm for normal conclusions 7. Examples.. References	
Shanin, N.A. On the Constructive Meaning of Mathematical Reasoning	226
1. Constructive mathematical objects 2. Historical informa- tion. Critique of S.C. Kleene's theory 3. Fundamental logico- mathematical languages 4. Algorithms of the behavior of a con- structive problem 5. An algorithm for deciphering elementary formulas 6. On the meaning of supporting formulas 7. Some in- formation from the constructive theory of sets 8. Certain ex- tensions of fundamental logicomathematical languages	

Card 4/5

Problems Connected With the Construction (Cont.)

SOV/1707

PART III. CONSTRUCTIVE MATHEMATICAL ANALYSIS

Markov, A.A. On Constructive Functions

315

Introduction 1. Recursive functions with rational values
2. Regularly converging sequences 3. Constructive real
numbers 4. Constructive sequences of real numbers 5. Con-
structive functions of a real variable. References

AVAILABLE: Library of Congress

Card 5/5

LK/ad
6-15-59

TSEYTIN, G. S. Cand Phys-Math Sci -- (diss) "Algorⁱythmic operators in complete constructive separable metric spaces." Len, 1959. 8 pp (Len Order of Lenin State Univ im A. A. Zhdanov), 200 copies. Bibliography: pp 7-8 (10 titles) (KL, 47-59, 113)

16

16(1)
AUTHOR: Tseytin G.S. SOV/20-128-1-11/58
TITLE: Algorithmic Operators in Constructive Complete Separable Metric Spaces
PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 1, pp 49-52 (USSR)
ABSTRACT: The paper is a generalization of the results already announced by the author in [Ref 4]. He considers the properties of operators applied to objects which are defined by algorithms. Following a suggestion of N.A. Shanin the author introduces the notion of a constructive metric space. He essentially uses notations and results of A.A. Markov [Ref 3]. A.A. Muchnik is mentioned in the paper.
There are 6 references, 4 of which are Soviet, 1 American, and 1 German.
ASSOCIATION: Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova (Leningrad State University imeni A.A. Zhdanov)
PRESENTED: May 14, 1959, by A.N. Kolmogorov, Academician
SUBMITTED: May 13, 1959

Card 1/1

TSEYTN, G. S.

"On the Question of Constructing Mathematical Models of Language."

report presented at the Conference on Information Handling, Machine
Translation and Automatic Reading of Texts, sponsored by Inst. of Sci
and technical information, Moscow, January 1961.

Tseytin, G. S.

Assembly of algorithms for translation of titles of whole numbers from
1 to 999999
Vypusk 3, Moscow, 1961, 10P

Paper read at the Moscow Conference on information processing, machine translation, and automatic text reading, January, 1961.

TSEYTIM, G. S. and KALUZHININ, L. A. and KULAGINA, O. S.

"Mathematic Problematics of Linguistics and Machine Translation"

presented at the All-Union Conference on Computational Mathematics and
Computational Techniques, Moscow, 16-28 November 1961

So: Problemy kibernetiki, Issue 5, 1961, pp 289-294

TSEYTIM, G.S.

Algorithmic operators in recursive metric spaces. Trudy Mat.
inst. 67:295-361 '62. (MIRA 16:2)
(Operators (Mathematics)) (Mathematical analysis)

TSEYTIM, G.S.

Theorems on the mean value in recursive analysis. Trudy Mat.inst.
67:362-384 '62. (MIRA 16:2)
(Mathematical analysis)

TSEYTN, G.G.

A method of presentation of the theory of algorithms and
denumerable sets. Trudy mat. inst. 72:69-98 '64.

Three theorems on constructive functions. Ibid.:537-542
(MIRA 18:9)

ZASLAVSKIY, I.O.; PELTIN, G.M.

Generalizations of the principle of constructive selection.

Trudy mat. inst. 72:344-347 '64.

(MIRA 18:9)

ACCESSION NR: AR4039289

S/0044/64/000/003/A010/A011

SOURCE: Ref. zh. Matematika, Abs. 3A57

AUTHOR: Tseytin, G. S.

TITLE: Mean value theorems in constructive analysis

CITED SOURCE: Tr. Matem. in-ta. AN SSSR, v. 67, 1962, 362-384

TOPIC TAGS: mean value theorem, constructive analysis, classical analysis, imbedded segment theorem, 1st Cauchy theorem, 2nd Cauchy theorem, Rolle theorem, Lagrange theorem, FR-number, duplex, constructive object sequence, quasi-number, matrix, linear equation, polynomial, eigen-vector

TRANSLATION: The author considers the possibility of transferring the following theorems of classical analysis into constructive analysis: 1) the theorem concerning imbedded segments; 2) the 1st Cauchy theorem (each continuous function which takes on values of different signs at the end-points of a segment, is equal to zero at a certain point of that segment); 3) the 2nd Cauchy theorem (each continuous

Card 1/6

ACCESSION NR: AR4039289

function takes on all intermediate values lying between the values at the end points of the segment); 4) the Rolle and Lagrange theorems of differential calculus. When considering these theorems in the "constructive" sense, the classical concepts appearing in their formulations are replaced by constructive concepts which have the same name, and the formulations themselves are understood from the point of view of a constructive interpretation of the mathematical inferences. For constructive variations of the concept of the real number and of the function of a real variable, the author uses the concept of the FR-number (duplex), presented by N. A. Shanin, and the concept of the constructive function of a real variable, presented by A. A. Markov, respectively. An algorithm which transforms each positive integer into an object of a given type, is called a sequence of constructive objects (of this type). By this approach, for example, the 2nd Cauchy theorem is constructively determined thus: it is possible to construct an algorithm which, with respect to an arbitrary function f , continuous on $[a, b]$ such that $f(x) = y$. The theorems enumerated above are constructively determined in a similar manner. Thus the proof of each of these theorems must contain a means of constructing the algorithm required by its constructive determination, and a refutation must consist in a proof of the impossibility of such an algorithm. In an example of the 2nd Cauchy theorem we shall consider certain cases which can be presented here. We make the following observa-

Card 2/6

ACCESSION NR: AR4039289

tions: 1) With each function f which is continuous on $[a, b]$, it is possible to associate, in a natural way, the following problem: to construct an algorithm which transforms an arbitrary duplex y , lying between $f(a)$ and $f(b)$, into a duplex x in $[a, b]$, such that $f(x) = y$. The algorithm required by the constructive determination of the 2nd Cauchy theorem would give a general method of solving such problems. Its impossibility would be connected with the absence of such a method as easily as with the fact that there exist separate functions for which algorithms with the property described above are impossible. 2) With each function f which is continuous on $[a, b]$ and with each duplex y lying between $f(a)$ and $f(b)$, it is possible to associate the following problem: to find a duplex x in $[a, b]$ such that $f(x) = y$. The algorithm required by the constructive determination of the 2nd Cauchy theorem would give a general method of solving such problems. Its impossibility would be connected with the absence of such a general method as easily as with the fact that it is possible to find a separate function f and a duplex y such that y lies between $f(a)$ and $f(b)$ and f does not take on a value equal to y at any point of $[a, b]$.

Therefore, from the point of view of constructive analysis, among all the possible refutations of the 2nd Cauchy theorem, it would be natural to select the following

Card 3/6

ACCESSION NR: AR4039289

two: 1) a function is found, for which an algorithm corresponding to it, as described above, is impossible, 2) a function f and a duplex y are found such that y lies between $f(a)$ and $f(b)$ and f does not take on a value equal to y at any point of the segment $[a, b]$. In case 2) the second Cauchy theorem would be refuted in this example. Analogous observations can be made from the other theorems, and for all of them (except the Lagrange theorem) the possibility of a refutation of form 1) by virtue of their formulations, is eliminated. For all the theorems studied in this work, the impossibility of algorithms required by their constructive determinations is proven, and in the case of the Cauchy and Lagrange theorems refutations of form 1) are cited. Consequently, not one of these theorems is transferred into classical analysis in the literal formulation. In establishing constructive analogs of the considered theorems, the concept of a quasi-number plays an important role. A quasi-number is defined as a rational number or a sequence of rational numbers which can not have a convergence regulator. Let C be a certain property of duplexes. The author says that the quasi-number Q conditionally possesses property C if each duplex which has the same base as Q possesses this property. All the constructive determinations of the theorems studied by the author assert the existence of algorithms which find duplexes possessing certain properties. As noted above, such algorithms are impossible.

Card 4/6

ACCESSION NR: AR4039289

The author shows that in all the considered cases it is possible to construct algorithms which find quasi-numbers that conditionally possess the required properties. In this way, not one of the theorems enumerated above can be refuted in an example. Consequently, for example, a function, continuous on a segment, which takes on values of different signs at the end-points of the segment and which is not equal to zero anywhere on the segment, is impossible, etc. All the negative results obtained in the article are based on the well known theorem in the theory of algorithms concerning the existence of a non-continuable algorithm which takes on two values. The proof of this theorem, explained in terms of normal algorithms, was cited in § 2 of the work. In that paragraph a series of assertions is proven which are of interest in themselves and which relate to the theory of FR-numbers (duplexes), the theory of matrices, linear equations, and polynomials. We note a few of them. 1) An algorithm that finds, with respect to each duplex x , which of the following two inferences is true: "it is not true that x is greater than zero", it is not true that x is less than zero" - is impossible. 2) An algorithm which finds, with respect to each pair of duplexes whose derivative is equal to zero, a duplex from that pair which is equal to zero - is impossible. 3) An algorithm which finds, with respect to each homogeneous system of linear equations with deter-

Card 5/6

ACCESSION NR: AR4039289

minant equal to zero, its (the equation's) non-trivial solution - is impossible.

4) An algorithm which finds, with respect to each symmetric matrix, its non-trivial eigen-vector - is impossible. Points 3) - 4) show that corresponding theorems of linear algebra cannot be transferred, in their literal formulation, into constructive analysis.

Abstractor's note: For the above-mentioned theorems of linear algebra we can prove their constructive variants which are analogous to constructive variants of theorems of classical analysis, contained in the main text of the article. B. Kushner.

DATE ACQ: 22Apr64

SUB CODE: MA

ENCL: 00

Card 6/6

TSEYTIH, I.
TSEYTIH, I.

Simplifying payment procedure in construction. Fin.SSSR 17
no.8:54-56 Ag '56: (MIRA 10:12)
(Construction industry--Finance) (Payment)

TSEYTTIN, L.I.

Spontaneous pneumopericardium as a complications of artificial
pneumothorax. Vest.rent.i rad. no.1:83-85 Ja-F '55. (MLRA 8:5)
(PNEUMOTHORAX, ARTIFICIAL, complications,
pneumopericardium)
(PNEUMOPERICARDIUM, etiology and pathogenesis,
pneumothorax, artif.)

MONKEYVICH, M.P.; BARDIYER, N.M.; TSEYTIM, P.I.

Model of electrophoretic apparatus from the experimental plant of
the Academy of Medicine of U.S.S.R. Biul.eksp.biol. i med. 41 no.4:
77-78 Ap '56. (MLBA 9:8)

1. Iz Opytnogo zavoda AMN SSSR i Instituta eksperimental'noy biologii
AMN SSSR, Moskva. Predstavlena deystvitel'nyy chlenom AMN SSSR V.N.
Chernigovskiy.

(ELECTROPHORESIS, apparatus and instruments,
new model (Rus))

SOV/36-56-60-1/10

AUTHOR: Tseytin, G. Kh.

TITLE: Computing Horizontal Diffusion in the Transformation of Air Masses
-- Stationary Type (K voprosu ob uchete gorizontal'noy diffuzii pri transformatsii vozdukhnoy massy - Statsionarnyy sluchay)

PERIODICAL: Trudy Glavnoy geofizicheskoy observatorii, 1956, Nr 60, pp 3-22 (USSR)

ABSTRACT: The author offers a general mathematical solution of the problem. A differential equation for a semiplane with other limiting conditions is presented with final formulas for particular cases. A sample of numerical computations is given. There are 6 tables, 1 diagram, a supplement consisting of 4 tables, and 7 references of which 5 are Soviet and 2 English.

Card 1/1

ACCESSION NR: AP4005818

S/0219/63/056/012/0052/0055

AUTHOR: Tseytina, A. Ya.

TITLE: Effect of vitamin P on ascorbic acid metabolism in the animal organism during exposure to high ambient temperature of short duration

SOURCE: Byul. eksper. biologii i meditsiny*, v. 56, no. 12, 1963, 52-55

TOPIC TAGS: vitamin P, ascorbic acid, ascorbic acid metabolism, high temperature effect, vitamin C, rutin, catechol, dehydroascorbic acid, diketogulonic acid

ABSTRACT: Four groups of rats and guinea pigs were investigated, the first group serving as a control and the other three being exposed to a high temperature. For 3-4 weeks prior to heat exposure, all four groups were fed the same diet including 25 mg vitamin C daily. In addition, group three received rutin and group four received catechol in daily doses of 5 mg for rats and 10 mg for guinea pigs. The control group was kept at 20-22°C and the other three groups were

Card 1/3

ACCESSION NR: AP4005818

exposed to 40-42°C for 1 hr with relative humidity of 26-31%. Rectal temperature was measured before and after high temperature exposure. Ascorbic acid, dehydroascorbic acid, and diketogulonic acid levels were determined in the adrenal glands, liver, and blood serum after decapitation. Results indicate that high temperature (40-42°C) of 1 hr duration reduces the ascorbic acid level in the adrenal glands and liver and increases the level in the blood serum. The dehydroascorbic acid level increases in the adrenal glands and liver and the total quantity of dehydroascorbic acid and diketogulonic acid increases in the blood serum. With preliminary administration of catechol, the ascorbic acid and dehydroascorbic acid levels in the organs do not change. The action of rutin is considerably less effective. The diketogulonic level in the adrenal glands and liver does not appear to be affected by high temperature or vitamin P preparations. A possible explanation for the fact that catechol prevents changes in the ascorbic acid and dehydroascorbic acid levels in the organs of animals exposed to high temperature is that the catechol has the capacity to stimulate the reduction of hydroascorbic acid to ascorbic acid with the aid of glutathione and thereby reduces ascorbic acid oxidation losses in the organism. Orig. art. has: 3 tables.

Card 2/3

ACCESSION NR: AP4005818

ASSOCIATION: Laboratoriya vitaminov C i P nauchno-issledovatel'skogo
instituta vitaminologii ministerstva zdravokhraneniya SSSR Moskva
(Vitamin C and P Laboratory of the Scientific-Research Vitaminology
Institute of the Ministry of Health SSSR

SUBMITTED: 16Feb63

DATE ACQ: 20Jan64

ENCL: 00

SUB CODE: AM

NO REF SOV: 008

OTHER: 007

Card 3/3

BEREZOVSKAYA, N.N.; TSEYTINA, A.Ya.; LAPINA, S.A.

Interrelations between vitamins C and P. Vop. pit. 21 no.5:
26-31 S.O '62. (MIRA 17:5)

1. Iz otdela vitaminov C i P (zav. - prof. N.S. Yarusova)
Gosudarstvennogo nauchno-issledovatel'skogo instituta vitaminologii
Ministerstva zdravookhraneniya SSSR, Moskva.

TSEYTINA, A.Ya.; LAPINA, S.A.

Effect of vitamin P (rutin) on the cholesterol content in the blood serum and the level of ascorbic acid in the organs of experimental animals. Vop. pit. 23 no.1:67-69 Ja-F '64.
(MIRA 17:8)

1. Iz laboratorii vitaminov C i P (zav. - prof. N.S. Yarusova)
Nauchno-issledovatel'skogo instituta vitaminologii Ministerstva
zdravookhraneniya SSSR, Moskva.

TSEYTINA, A.Ya.; LAPINA, S.A.; ARKAD'YEVSKIY, A.A.

Effect of noise on vitamin C. metabolism in experimental
animals. Vop.pit. 22 no.1:78-83 Ja-F'63 (MIRA 16:11)

1. Iz otdela vitaminov C i P (zav. - prof. N.S.Yarusova)
nauchno-issledovatel'skogo instituta vitaminologii i
shumo-vibratsionnoy laboratorii (zav. - kand.med. nauk.
A.A.Arkad'yevskiy) Nauchno-issledovatel'skogo instituta
gigiyeny i sanitarii imeni F.F.Erismana, Moskva.

*

S/0214/64/023/003/0081/0082

ACCESSION NR: AP4035939

AUTHOR: Tseytina, A. Ya.

TITLE: Effect of vitamin P on dehydroascorbic acid reduction in liver tissue of guinea pigs subjected to overheating

SOURCE: Voprosy pitaniya, v. 23, no. 3, 1964, 81-82

TOPIC TAGS: vitamin P (catechin), overheating effect, liver tissue, ascorbic acid level, dehydroascorbic acid reduction, glutathione level

ABSTRACT: Literature studies have shown that overheating (40 to 42°C) if rats and guinea pigs reduces the ascorbic acid level of the liver and increases its dehydroascorbic acid level, and that vitamin P administered to animals before overheating prevents these changes. The present study investigates the effect of vitamin P on liver tissue capacity to reduce dehydroascorbic acid into ascorbic acid and the relation of this process to reduced glutathione levels in the liver and blood. One group of experimental guinea pigs received vitamin P before exposure to overheating (40 to 42°C) for 1 hr, a

Technology

SUB CODE: LS

000

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R00175702000

Card 2/2

Card 1/2

ASSOCIATED INSTITUTIONS

SUBMITTED

NR REF S

04579

S/244/63/022/001/001/001
A004/A126

27.2700
27.1120
AUTHORS:

Tseytina, A. Ya., Lapina, S. A., Arkad'yevskiy, A. A.

TITLE:

Effects of noise on the C-vitamin metabolism of test animals

PERIODICAL:

Voprosy pitaniya, no. 1, 1963, 78 - 83

TEXT:

The authors studied the effect of noise of 110 db intensity and 1,250 cps frequency on the C-vitamin metabolism in guinea pigs that were subjected to this noise for intermittent periods of 4 hours. The entire test series covered a period of 21 days. The tests were carried out on male guinea pigs, weighing 500 g each, that were fed on the ordinary diet of hay, oats, carrots and bran. During the first 13 days of the tests, the animals received a daily dose of 25 mg of vitamin C each, this amount being increased up to 100 mg during the following 8 days. The tests proved that noise stimulation resulted in the reduction of the ascorbic level in adrenal glands and in a decreased urinary excretion of vitamin C. This was particularly clearly revealed when the animals were receiving daily doses of 100 mg of ascorbic acid. It was also found that the amount of urine excreted by the test animals over the 4-hour period decreased. There are 4 figures and 2 tables.

Card 1/2

Effects of noise on the...

S/244/63/022/001/001/001

A004/A126

ASSOCIATIONS: Vitamin C and P Department (Head - Prof. N. S. Yarusova) of the nauchno-issledovatel'skiy institut vitaminologii (Scientific Research Institute of Vitaminology); Noise and Vibration Laboratory (Head - A. A. Arkad'yevskiy, Candidate of Medical Sciences) of Nauchno-issledovatel'skiy institut gigiyeny i sanitarii im. F. F. Erisman (Scientific Research Institute of Hygiene and Sanitation im. F. F. Erisman), Moscow

Card 2/2

POLKOVNIKOVA, A.G.; KRUZHALOV, B.D.; SHATALOVA, A.N.; TSEYTINA, L.L.

Catalytic oxidation of propylene to acrolein in the presence
of inert diluents. Kin.i kat. 3 no.2:252-256 Mr-Ap '62.
(MIRA 15:11)

1. Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i
organicheskikh produktov.

(Propene) (Acrolein) (Catalysis)

TSEYTINA, A.Ya.

Effect of vitamin P on ascorbic acid metabolism in the animal body during brief action of high environmental temperature.
Biol. eksp. biol. i med. 56 no.12:52-55 D '62. (MIRA 17:11)

1. Iz laboratorii vitaminov C i P (zav. - prof. N.S. Yarusova)
Nauchno-issledovatel'skogo instituta vitaminologii (dir. -
kand. biologicheskikh nauk M.I. Smirnov) Ministerstva zdorav-
okhraneniya SSSR, Moskva.

POLKOVNIKOVA, A.G.; SHATALOVA, A.M.; TSEYTINA, L.L.

Preparation of acrolein by catalytic oxidation of propylene.
Neftekhimiia 3 no.2:246-253 Mr-Apr '63. (MIRA 16:5)

1. Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i
organicheskikh produktov,
(Acrolein) (Propene) (Oxidation)

TSEYINA, N.Ya.

U S S R.

2337. A method of producing boron nitride. --G. A. MEERSON, G. V. SAMSONOV, and N. Ya. TSEYINA (*Ogneupory*, 20, 72, 1955). Methods of producing BN are summarized; the best method is considered to be treatment of a batch of $B_2O_3 + CaO + NH_4Cl$ with NH_3 at $1,100^\circ - 1,200^\circ C$. The batch is made by sintering together B_2O_3 and CaO obtained by heating H_3BO_3 with chalk, the decomposition of the hydrate and the carbonate resulting in a fine distribution of B_2O_3 between the CaO particles and partial formation of Ca borate. It is claimed that this method results in a 92-93% yield of BN. It is stated that BN cannot be sintered into dense specimens by hot-pressing under normal conditions, since at high temperatures BN dissociates and takes up carbon. (2 figs., 7 tables.)

MEYERSON, G.A.; ZELIKMAN, A.N.; BELYAYEVSKAYA, L.V.; TSEYTINA, N.Ya.;
KIRILLOVA, G.F.

Studying conditions of the chlorination of titanium-niobium
carbide. Izv. vys. ucheb. zav.; tsvet. met. 3 no.5:108-115
'60. (MIRA 13:11)

1. Krasnoyarskiy institut tsvetnykh metallov. Kafedra metallurgii
redkikh metallov.
(Titanium-niobium carbide) (Chlorination)

MEYERSON, G.A.; ZELIKMAN, A.N.; BELYAYEVSKAYA, L.V.; TSEYTINA, N.Ya.;
KIRILLOVA, G.F.

Processing of complex titanium-niobium bearing rare earth
minerals by the carbidizing and chlorination method. Sbor.
nauch. trud. GINTSVETMET no.33:175-185 '60. (MIRA 15:3)
(Titanium ores) (Rare earths)

MEYERSON, G.A.; ZELIKMAN, A.N.; BELYAYEVSKAYA, L.V.; TSEYTINA, N.Ya.;
KIRILLOVA, G.F.

Investigating the chlorination processes of titanium and
niobium carbides, of complex titanium-niobium carbides and
certain other compounds. Titan i ego splavy no.5:167-180
'61. (MIRA 15:2)

(Titanium compounds)
(Chlorination)

TSEYTINA, N. Ya.
Category : USSR/Solid State Physics - Phase transformations in solid bodies

E-5

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1186

Author : Samsonov, G.V., Tseytina, N. Ya.

Title : Concerning the Mechanism of Surface Saturation of Iron and Steel by Boron

Orig Pub : Fiz. metallov i metallovedenie, 1955, 1, No 2, 303-306

Abstract : Based on the investigations of the microstructure and the microhardness of specimens of Armco-iron and of steel No .3, subjected to saturation by Boron from the solid phase at various temperatures (700 -- 1200°) and at various soakings (1 -- 17 hours), the authors believe that in pure iron there is a diffusion reaction of boron with formation of iron boride FeB, causing relatively high micro-hardness of the saturated layer (on the order of 730 -- 790 kg/mm²), and that in the presence of carbon the reaction consists mostly of diffusion on the boundaries of the grain of the solid solution of complicated carbo borides, causing the high hardness of the saturated layer (on the order of 1400 -- 2100 kg/mm²).

Moscow Inst. Non-ferrous Metals + Gold and M.I. Kalinin

Card : 1/1

TS 54TINA. N Ya.

Vacuum thermal analysis of binary systems of refractory metals
and investigation of several oxide systems

Detected by vacuum thermal analysis with the aid of a microbalance, on account of volatility of W oxides, was obtained at much lower temp. with the excess of WO_3 . It has the approx. compn. W_3B_4 with the lattice const. $a = 3.00 \text{ \AA}$, and $c = 13.80 \text{ \AA}$ and $d = 12.90$. Alloys of systems TiB_2 , ZrB_2 , TaB_2 , ZrB_2 , and TiB_2 - NiB_2 were prepd. by hot-pressing with subsequent annealing. All were monophasic, and their lattice const. were nearly proportional to their compns. The alloys were characterized by curves of resistance, this resistance varying gradually with the compn. The microhardness graph of the system changes continuously. The diagram of the system TiB_2 - NiB_2 is shown as curve and is very similar to the diagram of the system TiB_2 - ZrB_2 .

TSEYTINA, N. Ya.; ZELIKMAN, A. N.; LOSEVA, S. S. (Engr.)

"Nitrogen in Titanium Carbide and Titanium-Wolfram Alloys," Tsvetnyye metally,
No 4, 1947/

Digest W-14705, 1 Nov 50

85457

3/149/60/000/005/009/015
A006/A001

17.4311
152200

2808, 1142, 1411, 1439

AUTHORS:

Meyerson, G.A., Zelikman, A.N., Belyavskaya, L.V., Tseytina, N.Ya.,
Kirillova, G.F.

TITLE:

Investigation Into Conditions of Titanium-Niobium Carbide Chlorina-
tion

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Isvetnaya metallurgiya,
1960, No. 5, pp. 108-115

TEXT:

The authors investigated kinetics of complex titanium-niobium car-
bide chlorination and studied the process of chlorination in a fluidized bed on
a large-scale laboratory furnace. The former investigation was made with hot
pressed cylindrical specimens of titanium-niobium carbide, containing in %:
46.88 Ti; 13.91 Nb; 2.62 Si; 8.79 C_{bound}; 12.32 C_{free}; 3.76 N; 11.72 O etc.
Complex carbide was obtained from titanium-niobium concentrate and represented an
oxycarbonitride. Chlorination kinetics of complex carbide was investigated using
a horizontal quartz tube at 800, 600 and 400°C and 9 l/min chlorine feed. It was
found that chlorination of compact carbide specimens was accompanied by the forma-
tion of an external graphite layer. At 400°C the effect of this layer on the

Card 1/6

85457

S/149/60/COO/005/009/015
A006/A001

Investigation Into Conditions of Titanium-Nickium Carbide Chlorination

chlorination rate was not noticeable (the process having a kinetic nature). At 600°C and, in particular, at 800°C, some diffusion inhibition of the reaction was observed due to the graphite layer formed. The nature of the chlorination process becomes intermediate between kinetic and diffusion one, the former being prevalent. The dependence of the chlorination depth on the duration of the process was revealed and used to calculate the maximum possible duration of chlorination of various size carbide particles at 400, 600 and 800°C. (Table 1)

Card 2/6

85457

S/149/60/000/005/009/015
A006/A001

Investigation Into Conditions of Titanium-Niobium Carbide Chlorination

Table 1

Maximum possible duration of carbide particle chlorination

Temperature °C	Particle size mm	Duration of chlorination, min	
		in the presence of a graphite layer	without a graphite layer
800	0,250	8,0	5,58
800	0,075	2,8	1,68
800	0,042	1,2	0,94
600	0,250	17	13,6
600	0,075	5	4,1
600	0,042	3	2,3

Chlorination in a fluidized bed was studied on a furnace shown in Figure 4.

Card 3/6

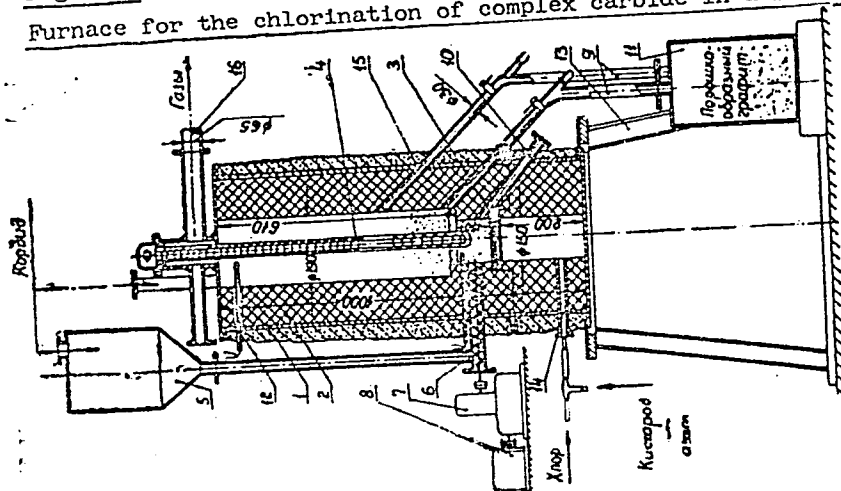
85457

S/149/60/000/005/009/015
A006/A001

Investigation Into Conditions of Titanium-Niobium Carbide Chlorination

Figure 4

Furnace for the chlorination of complex carbide in a fluidized bed



- 1 - body; 2 - graphite lining; 3 - graphite grid; 4 - nichrome heater; 5 carbide bin; 6 - screw; 7 - reductor; 8-d-c motor; 9-fine graphite discharge pipes; 10-furnace discharge pipes; 11-powder graphite container; 12-thermo-couple; 13-frame; 14-tuyers; 15-heat insulation; 16-gas exhaust pipe.

Card 4/6

85459

S/149/60/000/005/011/015
A006/A001

Radiographic Investigation of Recrystallization Processes and Release of a Carbide Phase of Hard Alloys Containing Tungsten, Titanium and Tantalum Carbides

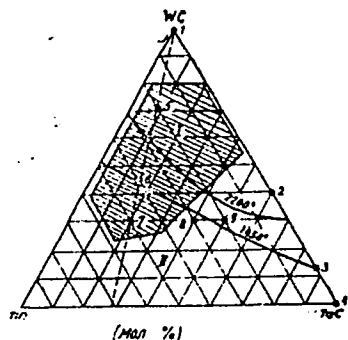


Figure 1

Phase diagram of the WC-TiC-TaC system; solubility of WC at 1,450 and 2,200°C are shown; the bi-phase range I contains a solid solution of TiC-TaC-WC and WC carbide; the mono-phase range II contains the TiC-TaC-WC phase; points 1 - 9 are the carbide components of the alloys investigated.

Card 5/6

85459

8/149/60/000/005/011/015
A006/A001

Radiographic Investigation of Recrystallization Processes and Release of a Carbide Phase of Hard Alloys Containing Tungsten, Titanium and Tantalum Carbides

There are 3 figures and 4 Soviet references.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute) Kafedra
fiziki metallov i rentgenografii (Department of Physics of Metals
and of Radiography)

SUBMITTED: October 27, 1959

Card 6/6

S/137/62/000/005/026/150
A006/A101

AUTHORS: Meyerson, G. A., Zelikman, A. N., Belyayevskaya, L. V., Tseytina, N. Ya., Kirillova, G. F.

TITLE: Processing of titanium-niobium rare-earth complex raw material by carbidization and chlorination

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 13, abstract 5680 ("Sb. nauchn. tr. In-t tsvetn. met. im. M. I. Kalinina", 1960, v. 33, 175-185)

TEXT: The processing of Ti-Nb raw material by the method of carbidization and chlorination was conducted on a laboratory and enlarged scale. The method consists in heating a mixture of the concentrate with coal in an electric furnace at 1,800 - 1,900°C. The complex raw material elements are then transformed into carbides and divided into the following two groups according to their properties: 1) TiC, NbC, TaC, SiC - strong refractory compounds, and 2) carbides of rare earth elements Ca, Na, Al and Fe, dissolving in diluted acids. Processing of a carbidization product with 10% HCl makes it possible to separate all soluble elements from refractory carbides. The washed and dried residue (solid solution

Card 1/2

Processing of titanium-niobium ...

S/137/62/000/005/026/150
A006/A101.

of Ti, Ni, Ta carbides) is chlorinated at 800°C with subsequent separation of chlorides in condensers and cleaning by rectification. Results of investigations are presented.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

S/598/61/000/005/007/010
D040/D113

AUTHORS: Meyerson, G.A., Zelikman, A.N., Belyayevskaya, L.V., Tseytina, N.Ya., and Kirillova, G.F.

TITLE: Investigation of the chlorination processes of titanium and niobium carbides, complex titanium-niobium carbide, and some other compounds

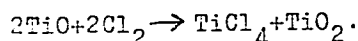
SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy, no. 5, Moscow, 1961. Metallurgiya i khimiya titana, 167-180

TEXT: The authors studied the reactions of titanium carbides and nitrides, niobium, complex Ti-Nb carbide, TiO and silicon carbide with chlorine in chlorination for obtaining $TiCl_4$. The experiments were conducted in view of the advantageous technological properties of titanium carbide and titanium carbenitride, the possible future use of the boiling layer for chlorinating them, and because precarbonization of rutile and ilmenite is used in foreign titanium production practice. Generalized results of the studies are given and a detailed illustrated description of the experimental equipment pre-

Card 1/3

Investigation of the chlorination processes ... 3/598/61/000/005/007/010
BC40/D113

sented. Titanium carbide, and titanium and niobium nitrides chlorinated fastest of all compounds, starting to chlorinate at 200°C. Active reaction of Nb carbide with chlorine was observed at 400°C, and of silicon carbide from above 600°C. Chlorination of TiO at a perceptible rate started from 300°C. In the range 400-700°C, the TiO chlorination degree was 50%, which is explained by the reaction



In the presence of carbon, TiO chlorinated much faster than a mixture of TiO₂ with carbon. Titanium carbide was prepared with lamp soot in a hydrogen atmosphere in a carbon-tube furnace at 2000°C, and niobium carbide in the same way at 1700-1800°C, and pressed into cakes with 110 kg/cm² and 325 kg/cm² pressure at 2150-2200°C and 2700-2750°C respectively. The chlorination of these carbides was accompanied by the formation of a graphite layer which did not affect the chlorination rate at 400°C but caused some inhibition at 600°C and 800°C. Ti-Nb carbide was produced by carbidization of loparite concentrate with subsequent washing in hydrochloric acid

Card 2/3

Investigation of the chlorination processes... S/598/61/000/005/007/010
D040/D113

for separating the carbides of other elements, and its composition (in %) was 46.33 Ti, 13.91 Nb, 0.70 Ta, 2.62 Si, 8.84 C_{fixed}, 12.32 C_{free}, 3.76 H, 3.56 O, and 7.41 other elements. The constants of TiC chlorination rate were higher than of NbC, particularly at 800°C, and the chlorination rate of Ti-Nb carbide from loparite was close to the chlorination rate of pure TiC. The maximum necessary time for chlorination of carbide particles of different size at different temperatures has been determined. Chlorination of Ti-Nb carbide in the boiling layer was studied in a small laboratory furnace and in one of larger size, and proved feasible with the use of chlorine as well as chlorine with air. The TiCl₄ output rate from powder carbide in the boiling layer proved to be more than 10 times higher than in direct chlorination of oxides or concentrated ore in mixture with carbon. The chlorination degree of Ti-Nb carbide in the boiling layer amounted to 97-99%. There are 10 figures.

Card 3/3

S/081/62/000/017/053/102
B158/B186

AUTHORS: Meyerson, G. A., Zelikman, A. N., Belyayevskaya, L. V.
Tseytina, N. Ya., Kirillova, G. F.

TITLE: Processing titanium-niobium rare earth complex raw material
by carbidization-chlorination

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 354; abstract
17K10 (Sb. nauchn. tr. In-t tsvetn. met. im. M.I.Kalinina,
v. 33, 1960, 175-185)

TEXT: The processing of loparite concentrate is examined. A Ta-Nb concentrate, containing (%) TiO_2 30-35, $(Nb,Ta)_2O_5$ 8-10, rare earth oxides 30, SiO_2 4.5-6.0, Fe_2O_3 2.5-3.0, CaO 4-6, Na_2O 6-8, is heated in a mixture with coal at 1800-1900°C in an electric furnace and the resulting carbides are chlorinated. At 1900°C carbidization is practically complete in 0.5 hr, 30-75 (50) % of the silicon being volatilized from the charge as SiO . In chlorination, 50% of the TiO is chlorinated at 400-700°C; in the presence of carbon, chlorination of the TiO at 500-600°C is practically

Card 1/2

Processing titanium-niobium rare...

S/081/62/000/017/053/102
B158/B186

complete in 1 hr. 94% of the NbC is chlorinated at 600°C in 1 hour.
96% of the complex carbide containing TiC-NbC-SiC is chlorinated in 1 hour
at 600°C. The kinetics of chlorination of the carbides obtained and
pressed by various methods are studied. Chlorination of the concentrates
in a pilot-scale unit is described. A reactor diagram is presented.
[Abstracter's note: Complete translation.]

✓
/

Card 2/2

YARYM AGAYEV, N.L.; RUDIN, V.Ya.; TSEYTLNOK, T.A.

Salt solubility isobar in the system $K_2NaCl_2NO_3 - H_2O$.
Zhur.neorg.khim. 10 no.4:976-980 Ap '65. (MIRA 18:6)

YARYM-AGAYEV, N.L.; RUDIN, V.Ya.; TSEYTLENOK, T.A.

Refractometric determination of the composition of solutions containing potassium chloride and sodium nitrate. Zhur.anal.khim. no. 6:701-705 Je '63. (MIRA 16:9)

1. Donetsk Polytechnical Institute.
(Potassium chloride) (Sodium nitrate) (Refractometry)

YARYM-AGAYIV, N.I.; TSEYTLNOK, T.A.

Thermodynamic properties of fused salt mixtures. Part 4. Zhur.
fiz. khim. 39 no.8:1856-1859 Ag '65. (MIRA 18:9)

1. Donetskii politekhnicheskii institut.

SAVINOVA, Ye.V.; TOVBIN, M.V.; TSEYTLÉNOK, T.A.

Kinetics of the nonstationary evaporation of solutions. Ukr.khim.zhur.
24 no.6:726-233 '58. (MIRA 12:3)

1. Kiyevskiy gosudarstvennyy universitet, kafedra fizicheskoy i kolloid-
noy khimii.

(Evaporation)

LUK'YANOV, V.S.; CHUMAK, K.I.; TSEYTLER, K.K.

Blood pressure in underground coal miners. Uch. zap. Mosk. nauch.
issl. inst. san. i gig. no. 8:46-48'61. (MIRA 16:7)
(COAL MINES AND MINING—HYGIENIC ASPECTS)
(BLOOD PRESSURE)

TSEYTLIN, A.

Our common cause. Sov. profsoiuzy 4 no.9:56-58 S '56. (MIRA 9:10)

1. Predsedatel' komissii po kul'turno-massovoy rabote tsekha otдела
glavnogo mekhanika Moskovskogo elektrolampovogo zavoda.
(Moscow--Community centers)

TSNYTLIN, A., doktor meditsinskikh nauk, professor.

Angiocardiology. Nauka i zhizn' 22 no.4:50 Ap '55.
(Angiocardiology) (MLRA 8:6)

TSEYTLIN, A. A.

Tseytlin, A. A. "The approximate calculation of statically indeterminate rod-and-joint systems according to the deformation method", Sbornik trudov (Ukr. nauch.-issled. in-t sooruzheniy), Kiev, 1948, p. 115-23, - Bibliog: 5 items.

SO: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 11, 1949).

TSEYTLIN, A. A.

Tseytl'in, A. A. "Metal Latticed arch-shell," Sbornik trudov (Kiyevsk. inzh.-stroit, in-t), Issue 8, 1948, p. 294-99

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

TSEYTLIN, A. A.

Construction Industry

Ukrainian construction exhibit. Biul. stroi. tekhn. 9, no. 17, Sept. 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

TSEYTLIN, A.A., kandidat tekhnicheskikh nauk,

Tower silos with water tanks. Biul.stroi.tekh.13 no.10:21-24 O '56.
(MIRA 10:1)

1. Ukrainskiy Nauchno-issledovatel'skiy institut sooruzheniy.
(Silos) (Water towers)

TSEYTLIN, A., kandidat tekhnicheskikh nauk; LUTSKEVICH, V., inzhener.

Using precast reinforced concrete elements in building granaries.
Gor.i sel'.stroi. no.4:6-8 Ap '57. (MLRA 10:5)
(Granaries) (Reinforced concrete construction)

TSEYTLIN, A.A., kandidat tekhnicheskikh nauk.

Precast reinforced concrete 100--meter span roof. Nov.tekh.1
pered.op.v stroi. 19 no.4:13-15 Ap '57. (MIRA 10:7)
(Roofs, Concrete)

TSEYTLIN, A., inzh.

Calculating bridge structures for local stresses. Avt.dor. 28 no.3:30-
32 Mr '65. (MIRA 18:5)

TSEYTLIN, Ayzik Aleksandrovich; SURYGINA, E., red.

[Precast reinforced concrete three-dimensional roofs]
Sbornye zhelezobetonnye prostranstvennye pokrytiia. Kiev,
Gosstroizdat USSR, 1964. 243 p. (MIRA 17:5)

TSEYTLIN, A.A., kand. tekhn. nauk; BELETSKIY, Yu.I., inzh.

Insulated arched covering for industrial buildings made present
from two-core panels. Prom. stroi. 41 no.10:37-38 0 '63.

(MIRA 16:11)

1. Nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy,
g. Kiyev.

TSEYTLIN, A.A., kand.tekhn.nauk; BELETSKIY, Yu.I., inzh.

Thin-walled undulate roof shells for industrial buildings. From.
stroitel. 40 no.8:53-56 '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy
Akademii stroitel'stva i arkhitektury UkrSSR.
(Roofs, Shell)

TSEYTLIN, A.A., kand.tekhn.nauk.

Standardization of reinforced concrete shell roofs. Bet. 1 zhel.-
bet. 8 no.5:210-212 My '62. (MIRA 15:6)
(Roofs, Shell) (Precast concrete)

TSEYTLIN, A.A.; FEL'DMAN, Z.D.; BUZNITSKIY, Ye.V.; DEKHTYAR, E.M.

Machine for making curvilinear reinforced concrete products. Suggested
by A.A.Tseytlin, Z.D.Fel'dman, E.V.Buznitskii, E.M.Dekhtiar. Rats.
i izobr. predl. v stroi. no.15:41-43 '60. (MIRA 13:9)

1. Po materialam Tekhnicheskogo upravleniya Ministerstva stroitel'stva
USSR.

(Concrete panels)

TSEYTLIN, A.A., kand.tekhn.nauk; BELETSKIY, Yu.I., inzh.

Experimental investigation of thin-walled large panels. ^{Set.1}
zhel.-bet. no.7:324-326 J1 '60. (MIRA 13:7)
(Concrete slabs--Testing)

TSEYTLIN, A.A., kand.tekhn.nauk; MIKOLYUK, I.D., inzh.

Machine for molding curved reinforced concrete panels. Mekh.stroi.
17 no.2:20-23 F '60. (MIRA 13:8)
(Concrete slabs)

GORSKIY, B.Z., kand. tekhn. nauk; TSEYTLIN, A.A., kand. tekhn.nauk

Erecting standard slag-concrete silo towers. Biul. stroi. tekhn. 12
no.1:7-9 Ja '55. (MIRA 11:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut sooruzheniy,
stroitel'nykh materialov i sanitarnoy tekhniki.
(Silos) (Slag cement)

97-58-5-4/14

AUTHOR: Tseytlin, A.A. Candidate of Technical Sciences.

TITLE: Experimental Research on Precast Shell Reinforced Concrete Vaults
(Eksperimental'nyye issledovaniya stoznogo zhelezobetonno-
tonkostennogo svoda)

PERIODICAL: Beton i Zhelezobeton, 1958, No. 5, USSR, Pp 175-178

ABSTRACT: Experimental research on precast shell reinforced concrete vaults is being carried out at Nauchno-issledovatel'skiy institut stroitel'-nykh konstruktsey (Scientific Research Institute for Building Construction ASIA, USSR). These vaults are concave in shape giving a corrugated appearance when put together and are used as roofs. Each vault is constructed from separate segments 4 or 6m long so that they could be assembled in a full arch of 12, 15 or 18m. The concave curve of the vault in its cross section is a hyperbole with short straight flanges which form ribs (see Figure 1). This shape results in considerable rigidity of construction. The thickness of the vault is 30-50mm. Figure 2 illustrates reinforcement of a panel which is of diamond shape mesh 3-5mm wires. The ribs are reinforced with 8-12mm diameter bars to which the mesh is welded. Figure 3 illustrates construction of joints of individual panels of the vault. Deformation tests on these vaults were carried out in 1956. Tests were also carried out

Card 1/2

97-58-5-4/14

Experimental Research on Precast Shell Reinforced Concrete Vaults.

on a vault consisting of three panels of a total depth of 6.6m and spanning 11.6m. The middle panel consisted of two units each 6m long and end panels of three units each 4m long (see Figure 4). Normal loading was 200 kg per 1 m run of the slab and the calculated loading 310 kg per 1m run of the slab. The concrete was Mark 200 and the crushing load applied to one side should have been 650 kg per 1m run of the slab. Tests were carried out in 5 stages. Figure 5 illustrates cracks caused by the crushing load and Figure 6 shows deformation of the vault under the loads of 1100 kgs per 1m run and 1270 kgs per 1 m run. Formulae for the calculation of the coefficient of the eccentricity increase is given. Analysis of the tests show that deformations in cross sections were caused by transverse bending moments. The maximum deformation when loaded by normal superimposed load was 4.83 mm or 2370 L against theoretical 5.08 mm. Figure 7 illustrates deformation curves for " middle wave " and Figure 8 the increase in deformations taken along the axis of the wave b - g. There are five references - 4 Soviet and 1 English.

Card 2/2

1. Reinforced concrete--Applications
performance 2. Reinforced concrete--Per-

TSBYTLIN, A.A., kand. tekhn. nauk.

Making reinforced concrete doubly bent panels. *Biul. stroi. tekhn.*
15 no.3:15-18 Mr '58. (MIRA 11:3)

1. Nauchno-issledovatel'skiy institut stroitel'nykh konstruktsey
Akademii stroitel'stva i arkhitektury USSR.
(Granaries) (Roofing, Concrete)

TSKHYTLIN, A.A., zasluzhennyi deyatel' nauki prof. [deceased]

Gastroesophageal regurgitation [with summary in English]. Vest.
rent. i rad. 33 no.2:3-8 Mr-Apr '58. (MIRA 11:6)

(STOMACH, dis.

gastroesophageal regurgitation (Rus))
(ESOPHAGUS, dis.

same)

TSEYTLIN, A.A., kand.tekhn.nauk

Precast reinforced concrete thin shell roofs for granaries. Nov. tekhn.
i pered. op. v stroi. 20 no.3:8-11 M '58. (MIRA 11:3)
(Roofs, Shell) (Granaries)

TSEYTLIN, A. A.

TSEYTLIN, A. A. - kand. tekhn. nauk i, GORSKIY, B. Z. - inzh.

Ukrainskiy nauchno-issledovatel'skiy institut sooruzheniy

Gipsovyye plith i sukhaya shtukaturka

Page 110

SO: Collection of Annotations of Scientific Research Work on Construction, com-
pleted in 1950, Moscow, 1951

STRUTINSKIY, Aleksey Bonifat'yevich, inzh.; TRET'YAKOV, Lev Dmitriyevich,
kand.tekhn.nauk; TSEYTLIN, Aleksandr Aleksandrovich, kand.tekhn.
nauk; VOLYANSKIY, A., red.; KUL'CHITSKAYA, O., red.; IOAKIMIS, A.,
tekhn.red.; FISENKO, A., tekhn.red.

[Builder's handbook] Spravochnik мастера-строителя. Kiev, Gos.
izd-vo lit-ry po stroit. i arkhit., 1957. 340 p. (MIRA 11:3)
(Building)

TSEYTLIN, A.A., kand.tekhn.nauk.

Precast reinforced concrete thin-section roofs for industrial
buildings. Stroi.prom. 35 no.9:35-37 S '57. (MIRA 10:10)

1.Nauchno-issledovatel'skiy institut stroitel'nykh konstruktsey
Akademii stroitel'stva i arkhitektury USSR, Kiyev.
(Precast concrete construction)
(Roofs)